

Abstract

A residual current device includes a current transformer CT1
5 for sensing a differential current flowing in mains supply
live L and neutral N conductors and a residual current
actuator RCA for disconnecting the supply from a load when the
differential current exceeds a predetermined level. The
device also includes a circuit for detecting a double grounded
10 neutral fault NF. Such circuit causes a current I_Z to flow
between the live and neutral conductors on the load LD side of
the current transformer, such current being at least
intermittently of sufficiently high amplitude and duration as
to cause disconnection of the supply by the component of the
15 current I_Z flowing through the current transformer in the
presence of a double grounded neutral fault.